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Dr. Steven Speer Orange County Health Care Agency Environmental Health Division 1241 East Dyer Road, Suite 120 Santa Ana, California 92705

Subject:

Well Destruction Report ARCO Facility No. 0629 13482 Brookhurst Street Garden Grove, California OCHCA Case No. 95UT62

Dear Dr. Speer:

Delta Environmental Consultants, Inc. (Delta), on behalf of Atlantic Richfield Company, has prepared this *Well Destruction Report* detailing the proper destruction of ten groundwater monitoring wells at ARCO Facility No. 629, (the Site, Figure 1) located at 13482 Brookhurst Street, in the City of Garden Grove, California. A *Remedial Action Completion Certificate*, dated November 17, 2005, was received from the Orange County Health Care Agency (OCHCA) confirming the completion of site investigation and remedial action at the Site. All groundwater monitoring wells were properly destroyed in order to complete closure granted by the OCHCA. A copy of the correspondence is included as Attachment A.

WELL DESTRUCTION ACTIVITIES

On December 8 and 9, 2005, Delta was on-site to oversee the destruction of ten groundwater monitoring wells (MW-1 through MW-9 and MW-9d). A site map showing the locations of all wells is provided as Figure 2. Well construction details for all wells are provided in Table 1. Cascade Drilling, Inc. of Norwalk, California (License No. C57-71510) was contracted to provide the equipment and personnel required to conduct the field activities. Prior to initiating field activities, a well destruction permit was obtained from the OCHCA, and Underground Service Alert and the OCHCA were notified. In addition, an encroachment permit from the City of Garden Grove was obtained to facilitate lane closure for the destruction of wells MW-6 and MW-8, located in Trask Avenue.

Groundwater monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-7, MW-9 and MW-9d were properly destroyed by over-drilling to terminal depth using ten-inch diameter hollow stem augers. The resultant



Well Destruction Report ARCO Facility No. 629 Garden Grove, California Page 2

boreholes were backfilled with bentonite grout from terminal depth to approximately 1.5 feet bgs through the hollow-stem augers. The borehole was completed to the surface with concrete.

Due to health and safety concerns involved with working in Trask Avenue, Delta was unable to complete the destruction of wells MW-6 and MW-8 during the December 2005 well destruction activities. After updating the necessary traffic control plans and obtaining a revised encroachment permit from the City of Garden Grove. Delta returned to the Site on the evening of February 25, 2006 to properly destroy wells MW-6 and MW-8.

Off-site groundwater monitoring wells MW-6 and MW-8 were properly destroyed by pressure grouting. Bentonite grout was pumped under pressure into each well casing until each well filled with grout. The top fivefeet of each well were over-drilled using ten-inch diameter hollow stem augers. The remaining annulus was backfilled with bentonite grout and completed to the surface with concrete.

REMARK/SIGNATURES

The recommendations contained in this report represent Delta's professional opinions based upon the currently available information and are arrived at in accordance with currently acceptable professional standards. This report is based upon a specific scope of work requested by the client. The Contract between Delta and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report were performed. This report is intended only for the use of Delta's Client and anyone else specifically listed on this report. Delta will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, Delta makes no express or implied warranty as to the contents of this report.

If you have any questions or comments concerning this report, please contact Bobby Lu at (

Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.

Christopher A. Ota

Project Manager

Bryan Van Wagner

California Professional Geologist No. 5820

Bryan L Van Wagner

OF

California Hydrogeologist No. 295

Attachments:

Figure 1

Site Location Map

Figure 2

Site Map

Table 1

Well Construction Details

Attachment A

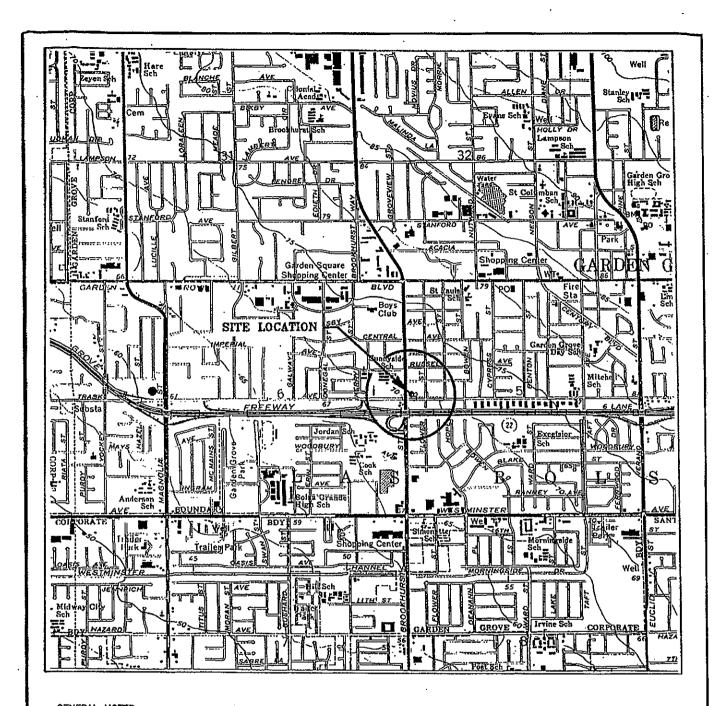
OCHCA Correspondence dated November 17, 2005

cc:

Mr. Bobby Lu, Atlantic Richfield Company, La Palma, California

Mr. Dan Yokayama, OCHCA, Santa Ana, California

Ms. Valerie Jahn-Bull, CRWQCB- Santa Ana Region, California



GENERAL NOTES: BASE MAP FROM U.S.G.S. ANAHEIM, CA. QUADRANGLE 7.5 MINUTE TOPOGRAPHIC MAP 1965 PHOTOREVISED 1981



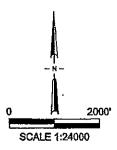


FIGURE 1
SITE LOCATION MAP
ARCO FACILITY NO. 629
13482 BROOKHURST STREET
GARDEN GROVE, CA.

PROJECT NO AMOO-6		DRAWN BY	
FILE NO. 5-607-67Q		PREPARED BY P. MANNS	
DATE 03 JUL 02		REVIEWED BY	1



TABLE 1

WELL CONSTRUCTION DETAILS ARCO FACILITY NO. 629 13482 BROOKHURST STREET GARDEN GROVE, CALIFORNIA

Well I.D.	Date Construction Completed	Well Type	Total Depth (feet bgs)	Screen Interval (feet bgs)	Casing Diameter (inches)
MW-1	09/22/95	Groundwater	26.5	5 - 26.5	4
MW-2	01/24/96	Groundwater	26	6 - 26	4
MW-3	01/24/96	Groundwater	26	6 - 26	4
MW-4	01/24/96	Groundwater	2 6	6 - 26	4
MW-5	01/24/96	Groundwater	26	6 - 26	4
MW-6	12/10/96	Groundwater	27	7 - 27	4
MW-7	07/27/00	Groundwater	25	5 - 25	4
MW-8	07/27/00	Groundwater	25	5 - 25	4
MW-9	10/22/03	Groundwater	25	5 - 25	4
MW-9d	03/09/04	Groundwater	43	38-43	4

NOTES:

bgs

= Below ground surface

ATTACHMENT A OCHCA Correspondence dated November 17, 2005



COUNTY OF ORANGE HEALTH CARE AGENCY

REGULATORY HEALTH SERVICES ENVIRONMENTAL HEALTH

JULIETTE A. POULSON, RN, MN DIRECTOR

> DAVID L. RILEY ASSISTANT DIRECTOR

MIKE SPURGEON
DEPUTY AGENCY DIRECTOR
REGULATORY HEALTH SERVICES

STEVEN K. WONG, REHS, MPH DIRECTOR ENVIRONMENTAL HEALTH

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Excellence Integrity Service

NOV 2 2 2005

November 17, 2005

Dameil Fah ARCO Products Company P.O. Box 5077 Buena Park, CA 90622-5077

Subject:

Remedial Action Completion Certification

Re:

Underground Storage Tank (UST) Case

ARCO Facility #0629 13482 Brookhurst Street Garden Grove, CA OCHCA Case No. 95UT62

Dear Mr. Fah:

This letter confirms the completion of site investigation and corrective action for the underground storage tank(s) formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptuess in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this Agency was accurate and representative of site conditions, this Agency finds that the site investigation and corrective action carried out at your underground storage tank(s) site is in compliance with the requirements of subdivisions (a) and (b) of Section 25296.10 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.3 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

This notice is issued pursuant to subdivision (h) of Section 25296.10 of the Health and Safety Code.

Please contact Steven Speer of our office at (714) 433-6255 if you have any questions regarding this matter.

Sincerely,

Steven K. Wong, REHS, MPH, Director

Environmental Health

Attachment: Case Closure Summary

CC:

Valerie Jahn-Bull, Santa Ana Regional Water Quality Control Board SB 562 Database, State Water Resources Control Board

Cleanup Fund Manager, State Water Resources Control Board

Larry Honeybourne, Environmental Health

